

**THE INTERNEURON—UCLA Forum in Medical Sciences—Number 11**—Edited by Mary A. B. Brazier, Brain Research Institute, University of California, Los Angeles. University of California Press, 2223 Fulton Street, Berkeley (94720), 1969. 552 pages, \$20.00.

This volume provides the proceedings of a symposium held at UCLA in September, 1967, sponsored by the Brain Research Institute. It includes 20 papers and their verbatim discussions regarding the structure and function of interneurons, cells which are arranged between the major sensory and motor pathways of the brain and spinal cord. Interneurons have been defined as internuncial neurons which are neither sensory nor purely effector-innervating; rather, they connect neurons with neurons. They are essential contributors to the integrative action of the nervous system. The major topics considered include excitatory and inhibitory processes, and the organization of the cerebellum, thalamus, hippocampus and cortex. Extensive consideration is given to the relatively simply nervous systems of invertebrate animals, whose study recently has provided major advances in understanding neuronal and glial functions. The volume will be a key reference for the neurophysiologist and neuroanatomist and will be a challenge to clinicians interested in the current advances in the basic neurosciences.

ROBERT A. FISHMAN, M.D.

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**MENTAL RETARDATION—An Annual Review**—Edited by Joseph Wortis, M.D., Director of Developmental Services and Studies Department of Psychiatry, Maimonides Medical Center, Brooklyn, N.Y. Grune & Stratton, Inc., Publishers, 381 Park Avenue South, New York (10016), 1970. 321 pages, \$19.75.

This is the first volume of an annual review of advances and developments in the field of mental retardation. Possibly it was stimulated by the development of a number of University Centers for research and training in mental retardation as well as the increasing emphasis on mental health. The topics reviewed in this volume represent a wide variety of disciplines including the behavioral, social and biological sciences as well as community and service programs for the retarded. The disciplines include psychology, sociology, neurology, obstetrics, neuropathology, biochemistry, genetics, neurophysiology, public health, and the law.

Physicians will be primarily interested in those chapters which deal with biological or clinical problems of mental retardation. Kirman's chapter on Clinical Aspects offers a general orientation towards etiology and diagnosis. Kirman also contributes a chapter on Down's syndrome (Mongolism) and begins by drawing a parallel between the contributions to science of Gregor Mendel and of Langdon Down for whom the syndrome is now named. This is inaccurate since Mendel did not know about chromosomes and was concerned only with the inheritance of certain characters.

Sutton and Boveri (1903) were the first to draw the relationship between the genes and chromosomes and thus initiated the field of cytogenetics. The first suggestion that Down's syndrome might be due to a chromosomal imbalance was made by Waardenburg in 1934. Kirman reviews various aspects of Mongolism including clinical, cytogenetic and biochemical studies. The use of appropriate tables and figures would have made this a better review.

There is an extensive treatment by Voeller of neurological problems associated with retardation including 27 pages of useful tabulations of congenital malformations, chromosome anomalies and inborn errors of metabolism. The XXY (Klinefelter's syndrome) male is omitted as well as the 4p- (Wolf-Hirschhorn syndrome) and the

18q- syndrome, each of which is more common than many of the chromosome abnormalities cited. The tabulations on the inborn errors are complete; unfortunately, they are reviewed again by Snyderman in her chapter on inborn errors of metabolism. This chapter is sound as well as being interpretive in pointing out the problems in establishing the relationship of the metabolic error to mental retardation.

Each review has an excellent bibliography, e.g. Voeller's has 673 references, Snyderman's 164 and Kirman's 123. There is good breadth in the topics selected. Tighter editing might have removed some of the overlap in several sections. It is unfortunate that the price of the book (\$19.75) may put it out of the reach of most individuals. However, it will be a valuable addition to a reference library on mental retardation.

S. W. WRIGHT, M.D.

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**MANUAL ON ARTIFICIAL ORGANS—Volume I—The Artificial Kidney—A Guide to Understanding for the Physician and for the Patient**—Yukihiko Nosé, M.D., Ph.D., Head, Artificial Organs Research Laboratory, Research Division; Staff, The Cleveland Clinic Foundation, Cleveland. The C. V. Mosby Company, 3207 Washington Blvd., St. Louis, Mo. (63103), 1969. 343 pages, with 401 illustrations, \$27.75.

The book by Dr. Yukihiko Nosé comes at an opportune moment in the development and expansion of dialysis as a therapeutic measure for patients with end-stage renal failure. The manual has sufficient theory and detailed technical knowledge which can be used effectively by physicians, nurses, and the dialysis patients. It is well illustrated and has a good source of references. It has a considerable amount of detailed information on the effects of dialysis and how to set up dialysis equipment.

This book should make the care of dialysis patients easier in that the theory and the working of most of the equipment is well illustrated and explained. Many of the complications of dialysis and how these can be safely corrected are given special attention. There is an excellent section on Scribner shunts—how they should be inserted and their post-operative care. The manual also talks about peritoneal dialysis, it discusses its advantages and disadvantages and also stresses that newer developments are being made. The future will probably see new and improved dialysis machines developed. The manual is recommended highly for medical libraries. It will be of value to the internist who is taking care of patients on chronic hemodialysis, the surgeon who is inserting Scribner shunts, the nurses and technicians who are participating in center and home dialysis. It is also a valuable book for students who would like to learn about the actual mechanics of the various dialysis machines.

SAMUEL L. KOUNTZ, M.D.

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**VIRAL INFECTIONS OF THE HUMAN FETUS**—Gilles R. G. Monif, M.D., Assistant Professor of Obstetrics and Gynecology, University of Florida College of Medicine, Gainesville. The Macmillan Company, 866 Third Avenue, New York, N. Y. (10022), 1969. 164 pages, \$9.95.

This monograph is concerned with the field of congenital viral infection and is apparently designed for use by the obstetrician or neonatologist. Two chapters are concerned with the general principles of virology, and an entire chapter has been devoted to each of the various viruses which are considered to produce human congenital viral infections. Each chapter contains a lengthy and current bibliography. The discussions are most descriptive in nature and present clinically relevant information regarding prophylaxis and expectations for fetal or newborn involvement. However, because of the very nature

of the subject, these are often speculative and general in content.

The book is nicely bound and excellent photographs and diagrams make for easy reading. Unfortunately there is a general diffuseness throughout the text and probably all of the solid information contained within the monograph could have been concisely presented as a single review article. The book should be available in medical libraries for those interested in a quick clinical review of a particular maternal viral infection or for those seeking additional bibliographical sources relevant to viral infection of human fetuses.

ROBERT C. GOODLIN, M.D.

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**ARTHRITIS AND PHYSICAL MEDICINE**—Volume Eleven of Physical Medicine Library—Edited by Sidney Licht, M.D., assisted by Herman L. Kamenetz, M.D., with 21 contributors. Elizabeth Licht, Publisher, 360 Fountain Street, New Haven, Conn. (06515), 1969. 521 pages, \$14.00.

As usual Dr. Licht has assembled a distinguished group of collaborators including Rene Cailliet, William Hollingsworth, Allan St. John Dixon, P. Hume Kendall, John S. Lawrence, Leonard Marmor, Jerome Tobis, and Robert Bennett.

This is a book that would be useful to the general practitioner who is interested in the complete management of his patients with various forms of arthritis. It is not illuminating for orthopedists, internists, rheumatologists or physiatrists, except as a reference book.

The chapters by Dr. Cailliet on the mechanics of joints; by Dr. Kendall on the medical management of arthritis; by Leonard Marmor on an overview of available surgical procedures; and by Herman Kamenetz on massage manipulation and traction, are of more than passing interest. The chapters on heat and cold are technical and laborious with 253 references!!

This is generally a quickly read, well illustrated book which would be helpful to the general practitioner in the management of arthritis.

ELIZABETH S. AUSTIN, M.D.

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**PREMATURITY AND THE OBSTETRICIAN**—Denis Cavanagh, Professor and Chairman, Department of Gynecology and Obstetrics, Saint Louis University School of Medicine, Director of Gynecology and Obstetrics, Saint Louis City Hospital, Saint Louis, Missouri; and M. R. Talisman, Clinical Assistant Professor of Obstetrics-Gynecology, The University of Miami School of Medicine, Miami, Florida. Foreword by Arthur E. McElfresh. Appleton-Century-Crofts (Division of Meredith Publishing Company), 440 Park Ave. So., New York, N.Y. (10016), 1969. 542 pages, \$16.50.

This is the first comprehensive and authoritative text yet published that addresses itself to the multidimensional aspects of prematurity as the Number One health problem confronting obstetricians, pediatricians, obstetric anesthesiologists, and nurse-specialists in the intensive care nursery.

In addition to the clinical specialists noted above, this book has immediate relevance to the everyday work of public health nurses, health educators, medical social workers, and public health administrators.

The book is written by ten eminent authorities in the field of perinatology, and it is divided into eight sections: section 1 is a statement of the problem of prematurity from the standpoint of demography and its significance as a world health problem; section 2 is a trenchant examination of prematurity from the vantage of the epidemiologist; section 3 addresses itself to a consideration of the pharmacologic factors that may influence the outcome of prematurity, including such variables as the role of drugs, and the effects of analgesics and anesthetics; section 4 is a *vade me cum* for the ob-

stetrician charged with the management of the premature labor; section 5 is an exposition of the caveats that should serve well the obstetrician facing the immediate care of the premature infant; section 6 takes up the contributions the pediatrician may make to the reduction of morbidity and mortality once the infant is born; section 7 reviews the invaluable input the alert pathologist may make to a better understanding of the anatomical factors that are a necessary and/or sufficient cause of neonatal death; and section 8 points up the guidelines that are currently available for a reduction in the incidence of and for improvement in the survival and health of the prematurely born member of the human race.

This book is recommended for a most catholic readership in the health sciences, including obstetricians, pediatricians, obstetric anesthesiologists, clinical and anatomical pathologists, public health and nursery nurses, medical social workers, and public health administrators.

GEORGE F. MELODY, M.D., M.P.H.

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**THE CYTOLOGY OF EFFUSIONS**—Pleural, Pericardial and Peritoneal and of Cerebrospinal Fluid—Second Edition—A. I. Spriggs, D.M. (Oxon), F.R.C.P. (Lond), M. C. Parh., and M. M. Bodington, M.A., B.Sc. (Oxon), M. C. Path. Grune & Stratton, Inc., 381 Park Avenue South, New York, N.Y. (10016), 1969. 174 pages, \$17.50.

This is the second edition of a monograph dealing with the cytology of benign and malignant serous effusions, including a new section on cerebrospinal fluids. The detailed descriptions of almost all types of cells likely to be found in effusions and cerebrospinal fluids are excellent, and the extensive, clear illustrations comprise nearly 200 photomicrographs, about a third of which are in color. An interesting history of the cytodagnosis of serous fluids, a concise, adequate appendix on technical methods, and a thoroughly compiled bibliography of more than 300 papers complete the monograph.

This book should be of particular interest to pathologists and cytologists as a reference for the study and identification of the more uncommon cells appearing in effusions and spinal fluids. Although most of the photographs depict cells stained by the May-Grünwald and Giemsa methods, microscopists accustomed to viewing Papanicolaou-stained preparations will still appreciate the cytologic features illustrated, however subtle.

STUART LINDSAY, M.D.

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**RADIOLOGY OF THE SMALL INTESTINE**—Richard H. Marshak, M.D., Clinical Professor of Radiology, Mount Sinai School of Medicine, New York; and Arthur E. Lindner, M.D., Assistant Professor of Medicine, New York University School of Medicine, New York—With a chapter on the Small Bowel in Infants and Children by John E. Moseley, M.D., Associate Clinical Professor of Radiology, Mount Sinai School of Medicine, and Jack G. Rabinowitz, M.D., Associate Clinical Professor of Radiology, State University of New York, Downstate Medical Center, Brooklyn; and with a chapter on Uncommon Lesions by Arthur R. Clemett, M.D., Associate Clinical Professor of Radiology, New York University School of Medicine. W. B. Saunders Company, West Washington Square, Philadelphia, (19105), 1970. 310 pages, \$32.00.

This is a superb book and is the best radiologic work on the small bowel. This is not surprising as Dr. Marshak is the leading authority on radiology of the small bowel in the world. Articles he has written alone, as well as those written with Dr. Lindner, are classics in the field.

The book is relatively short for the subject it covers, having only 500 pages including illustrations. It makes up for this by the conciseness of the text and superb illustrations. The latter are of larger size than usually encountered in medical books, making it much easier for the reader to see the abnormality. The references are